

ASV Mk 19B

By Chris Poole

ASV Mk 19B grew out of an immediate post war (1945- 46) TRE/Ekco (note 1) research program to investigate the feasibility of Cloud and Collision Warning Radar (CCWR), the result of which was the Ekco E34 search radar set.

By the end of WW2 it had become woefully apparent that there was a need to have a new 'fleet' Anti submarine aircraft since the Fairey Firefly, which had been converted to this role, was showing that there was very little design development left in the airframe and it was also suffering from 'wartime' era radar. This led to the Admiralty issuing specification GR.17/45 for a new aircraft which would have an ASV role, have 2 engines, be capable of carrying a range of weapons and have a Radar suite which could be capable of detecting submarine snorkels and periscopes in various sea states. The result of this was the Fairey type Q which became the Fairey Gannet.

Since TRE were already working with Ekco on CCWR and knew of the potential of the E34, this Radar was developed into the Ekco Type E38, which was to all intents and purposes ASV-19. The original design concept was for a 'POD' Radar to be fitted under the starboard wing (similar to the American Gruman Avenger TBM-3) and this dictated that the Radar had a conventional scanner unit with a 150 degree azimuth sweep. This Radar was the ASV Mk 19A.

Since the Gannet was late in service, in 1953 the Royal Navy/FAA acquired an undetermined number of Gruman anti-submarine warfare versions of the Avengers in 1953 under the Mutual Defence Assistance Program (MDAP). These aircraft were designated the **Avenger AS Mk IV** or **AS Mk V**, and were used in the ASW role until the introduction of the Gannet in 1955. In these aircraft the American Radar was removed and replaced with ASV Mk 19A. In conjunction with this, a T1 variant of Percival Sea Prince was produced to act as a flying classroom where the ASV 19 was conventionally mounted in the nose, and with 3 scopes fitted on workstations in the cockpit so that 3 Radar Operators/Observers could be trained at any one time.

The Gannet evolved with a retractable dustbin Radar suite, hence the need to redesign the scanner and indicator unit, which became ASV Mk 19B. It is fairly certain that these units were made under a separate contract with EMI, using similar design principles to H2S units.

Note 1. TRE is Telecommunications Research Institute, and was later named RRE, Radar Research Establishment. Ekco was the trade name for E.K.Cole Ltd. The Radar/Telecom section set up in 1952 as a separate division called EKCO Electronics Limited.

Editor's note: More information about the development of the ASV Mk 19B may be obtained from www.ekco-radar.co.uk/ASV19/asv.php. As well, the author of this article has published a further article about the development of Radar and WW2. This can be viewed on <http://www.malmesbury-memories.co.uk/wartimeindex1.html>.